



EQL
Memorandum
No. 4

***STATE POWER PLANT SITING:
A SKETCH OF THE MAIN FEATURES
OF A POSSIBLE APPROACH***

*by James E. Krier and Lester Lees
with the assistance of Daniel Dawes*

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ENVIRONMENTAL QUALITY LABORATORY

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Acknowledgements

A number of persons in the public and private sectors contributed to our reflections in this memorandum by commenting on earlier working papers, engaging in conversations on central issues, and providing valuable ideas through their own studies. While they are far too numerous to mention, we want to express our appreciation for their contributions. That we have not always agreed only underscores the fact that comments from them have clarified our own thinking.

Preface

The Environmental Quality Laboratory has disseminated the results of its work in a series of detailed formal reports that are widely circulated. In many cases, however, it is more important that the information be disseminated quickly but to a smaller group. To facilitate the circulation of this second kind of information a different form of report, which we will term an EQL Memorandum, has been established. The recipients for each note will be selected on an ad hoc basis but the notes will be available to anyone on request.



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ABOUT THE AUTHORS

Lester Lees, director of the Environmental Quality Laboratory, is professor of aeronautics and environmental engineering at Caltech. He is the author of numerous papers on problems of high speed flight, especially entry of missiles and spacecraft into planetary atmospheres. He has also worked on the identification of such objects by means of their wake signatures. He is a consultant to the aerospace industry and to several government agencies. In the last two years his main interests have shifted to large-scale environmental problems. He is a member of the National Academy of Engineering.

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State Power Plant Siting:
A Sketch of the Main Features of a Possible Approach

by

James E. Krier and Lester Lees

Work on various phases of power plant technology and siting has been underway within the Environmental Quality Laboratory (EQL) at the California Institute of Technology for some time. Of particular relevance to this memorandum, a good deal of effort has been devoted to institutional aspects of the siting process.* Our purpose in what follows is to draw from our past work -- and from the discussions and work of others -- a sketch of the major outlines of one possible approach to power plant siting for the state. We hope in doing so to give our present views about the issues and how they might rationally be resolved, not so much to convince as to inform, stimulate fruitful ideas, and help provide the basis for constructive debate. We ourselves are not necessarily wedded to any of the discussion that follows; we find our own minds changing from time to time as we study the problem further or confront sound suggestions from others.

Part I of this memorandum briefly outlines the major features of what we see as a fruitful approach to the siting problem. Sections A through E of Part I describe some elements of the approach; Section F sketches the actual siting decision process we suggest, and in doing so shows how the elements play into the process. Section G comments briefly on a suggested role

* The work began with L. Lees et al., People, Power, Pollution (EQL Report No. 1, September 1, 1971).

for judicial review.

In Part II we attempt to reduce our ideas to a fairly precise outline for a state siting statute, and to deal with certain matters of detail not covered in Part I. Section A of Part II introduces the statutory outline by summarizing each of its provisions; Section B sets forth the outline itself. The Appendix to this memorandum depicts our suggested approach in time-line fashion; it should be helpful in reading and understanding the proposal.

I. KEY FEATURES OF A POSSIBLE SITING APPROACH

A. Siting Council

Our approach envisions a one-stop siting agency, composed exclusively of public members, which would have the sole authority and responsibility to select and certify, from among alternatives, the sites and conditions for nuclear and fossil-fueled power plants and associated transmission facilities to be constructed within the state.* The functions and powers we would assign to the council will be made clear in subsequent parts and illustrated in Section F. Here we wish only to comment on the issues of (1) alternative sites; (2) one-stop authority and the preemption it implies; (3) council membership.

1. Alternative sites. The siting process is today characterized by what can aptly be called a "one-site syndrome"; it tends to work as follows: The utility determines its needs, draws up its plans, and selects a particular site suitable to it with as little fanfare and attention as possible. Although a certain amount of attention is given to alternative sites, designs, and fuels

* We would be content for now to leave within the State Public Utilities Commission its present constitutional authority over convenience and necessity and over rate setting.

within the utility before this selection is made, the public does not participate in this process at present. By the time utility plans reach a public forum -- either the PUC or a local agency -- the company typically has spent a good deal of time and money and has become entrenched in its position.

By the same token, the reaction of the concerned public, when it finally learns of utility plans late in the game, has come to be marked by strong opposition to proposed developments, and to our mind for a quite recognizable and justifiable reason: the public has been excluded from a planning process that it perceives as likely to have a heavy bearing on the quality of the environment, and thus on the quality of life. So the concerned public also becomes entrenched, not because of past investment, but rather out of an angry reaction to the activities of the utilities. What has happened when these two entrenched positions meet is now well known -- there ensues a long period of charges and countercharges usually culminating in litigation. The litigation itself drags on, sometimes for years. The costs to society are enormous, not only because litigation is expensive, but because needed electrical energy is not being provided and accumulated investment capital may be paying interest with no return. If strong opposition develops late in the game, after construction has started, the loss to the utility can amount to as much as \$100,000 per day for an 1150MW(e) plant.

This sort of planning has thus resulted in destructive delay, or to say it another way, in destructive consumption of time. It is destructive because, happening when it does, it is accompanied by high expense; it is also

destructive because it is poor planning, focused entirely on a single site or a single transmission corridor (as opposed to the advantages and disadvantages of each among a number of alternatives), and unlikely to reach constructive compromise reflecting the informed views of all concerned.

A sound planning process would (1) give early attention to alternative sites, designs, fuels, transmission corridors, etc., and (2) attempt to enlist rather than combat the views of various segments of the public. To realize the first objective above, we propose that the siting process (a) begin by identifying an inventory of possible sites, perhaps as many as five or more possible alternative sites for each site required; (b) that it next -- based on preliminary studies -- reject unsuitable sites, with a view to leaving at least three suitable alternatives; (c) that it then prepare detailed impact statements on the advantages and disadvantages of alternative suitable sites; and (d) that it finally select a final site and proceed with a detailed study and plan designed to minimize environmental impact with respect to that site, subject to relevant constraints. Unsuitability, advantages and disadvantages of alternative suitable sites, and selection of and planning for the selected site should all be judged against relevant environmental criteria, some of which are suggested in Section F.

To realize the second objective above, we propose that open planning should be a central feature of the siting process. The characteristics and functions of open planning are discussed in Section C below.

A final word on consideration of alternatives and open planning:

we do not for a moment think these are cheap in terms either of time or money. But we do believe they are cheaper in both senses than the present one-site syndrome, and further that they represent better planning that will produce better, more acceptable plans.

2. One-Stop Authority and Preemption. A rational siting program must, we believe, abandon the pattern of fragmented authority that characterizes the present siting process. Fragmented authority has produced unnecessary delay, confusion, parochialism, inconsistency, and buck-passing. We believe that in the interests of efficient and thorough planning the siting council should (a) operate on a one-stop basis and (b) should preempt local jurisdiction over the environmental issues related to siting. The one-stop approach is essentially a horizontal concept; it says that a utility would no longer be required to obtain permits from a myriad of state resource and environmental agencies. Rather, only the council's authority would be required in order to construct a plant or a transmission line so far as environmental considerations are concerned (the PUC or municipal bodies would still have to grant a certificate of convenience and necessity).^{*} Preemption is a vertical concept; it says that, at least as to environmental considerations, local government would have no ultimate authority or veto power over siting. This does not mean, however,

^{*} Although the standards of other state agencies may still be applicable. For example, one could have a one-stop agency but still require the agency to observe air quality standards promulgated by the Air Resources Board. On the other hand, the agency could be given authority to certify a plant where the result would be that ARB air quality standards would be exceeded, so long as applicable federal standards are still met. There are good arguments for each approach, and some of them are canvassed in a report by RAND, R.H. Ball, R.G. Salter, et al., California's Electricity Quandary: II. Planning for Power Plant Siting, (Sept. 1972). We have not reached a final judgement on the issue.

that local government would have no voice -- a point we discuss next.

3. Council Membership. Because the siting council would be a new governmental agency, because it would represent a new approach to siting in the state, and because we conclude it should be an independent as opposed to an executive agency, it should consist only of public members. By this we mean members appointed from the general public rather than drawn on an ex-officio basis from among officials in present agencies. Size of the council, methods of appointment, qualifications for and terms of office could follow a number of patterns. For example, the council might consist of five permanent members* -- one appointed by the Governor (with or without advice and consent), two by each chamber of the legislature. At least one member might represent the power industry, at least one the general public, at least one public health concerns, and at least one environmental concerns. Qualifications bearing on background, experience and knowledge, and conflict of interests should be established. Staggered terms of three or four years (after the first round of appointments) could be utilized to gain the dual benefits of freshness and experience.

We would also provide for temporary members drawn to represent local interests (drawn, for example, from the cities and counties in which sites under consideration in any particular proceeding are located.) These local representatives would not have voting power, but they would be expected to serve as persuasive spokesmen for local interests. Local government, then, would have a voice, but not a veto. And local interests would be protected in another important way. We would provide, as did S.B. 1310 (passed by the

* The council would, of course, also employ a sizeable staff. (See Section E for discussion of funding.)

Senate in 1972), that the siting council could not override a local ordinance or regulation without a specific finding that such action is necessary for the public welfare and that there is no more prudent and feasible alternative to such action.

Finally, our approach would provide for input from relevant state officers (e.g., within the Resources Agency); they would be consulted by the council and could participate in council proceedings as ad hoc members, but they would be without vote.

B. Open Planning

The second main element of our approach -- and perhaps the most important -- is open planning. Open planning has no precise contours; we describe its essence here and illustrate its operation in Section F.*

The phrase "open planning" itself implies the central features of the concept. First, it implies an open process -- one that contemplates public access to relevant facts and full public participation in the course of making decisions (rather than an airing of public views after a utility decision is made). This means utilities must actively seek outside inputs, ideas, and evaluations. Second, it implies a planning process -- a cooperative venture rather than an adversary contest in which each side tries in a public hearing to convince a third party of the correctness of its views. The idea is to avoid undue use of public hearings, which are essentially adverse and adjudicatory, as a planning device.** As Section F and Part II make clear,

* For an expanded discussion of open planning, see People, Power, Pollution, pp. 23-51

** As People, Power, Pollution (p. 29) put it: "Hearings require predetermined positions and tend to stifle flexibility and cooperative planning."

however, public hearings do play a part in our approach, but only for the making of ultimate decisions* after programmed phases of open planning.

(And the preceding stages of open planning should clarify the issues at these public hearings and thus make them shorter and less confused -- traits public hearings have seldom exhibited in the past.)

The particular form of open planning would vary from case to case, but in each instance it would contain certain basic ingredients. Open planning would begin at the outset of the decision process -- at the time, that is, when a utility initiates its own inquiries about the need for new capacity, its location, design, and operation. Utilities would be required to announce the beginning of their inquiries and to invite meetings with any concerned groups and individuals, both public and private. They would also be required to actively seek out such groups and individuals and to solicit their views. At each stage of the process, the utilities would be required to make all relevant information freely and fully available.

The particular techniques of open planning employed in the meetings referred to above would include formation of utility-public task forces, office conferences, workshops, consultations, site visits, and any other suitable format. The idea would be to achieve an on-going planning process designed to exchange views and to reconcile differences -- whether through negotiation or some more formal method such as arbitration, mediation, or conciliation. Planning sessions could be held on an open (public) or closed basis.

* Rejection of unsuitable sites; selection of final site; approval of final plan with conditions.

The substance of open planning would, depending upon the particular case, relate to need for new capacity, alternative sites, alternative fuels, designs, and methods of construction and operation, transmission corridors, or all of these -- and all from the standpoint of advantages and disadvantages considered in a broad environmental perspective.

The open planning process would be policed by a number of means: the environmental advocate (discussed next); reports regarding open planning in the statements we would require (see Section F); objections by concerned groups; and the public hearings we would require at various stages (discussed, again, in Section F). We would anticipate that the siting council would promulgate rules or guidelines to govern the various phases of open planning.

C. Environmental Advocate

Environmentalists and other groups and individuals likely to be concerned with power plant siting decisions face enormous difficulties in organizing and funding informed and effective input into the decision-making process.* Yet, as we have suggested, such input is essential if open planning is to become a working reality. For this reason, we suggest an environmental advocate as part of our approach to power plant siting. The advocate's job would be to see that environmental concerns are fully articulated and represented throughout the decision process, including judicial review. Perhaps most important, the advocate would serve as a "broker" in open-planning phases, organizing relevant interests, arranging meetings, generating information, conducting negotiations, and representing in the process relevant

* See J. Krier, Environmental Watchdogs: Some Lessons From a "Study" Council, 23 Stanford Law Review 623, 662-66, 668-71 (1971).

views that have no other spokesman.

The advocate should be independent of the council, although he (and a small staff if needed) would be funded by the same siting legislation funding the council. Independence is important because the advocate, properly conceived, is one source of input in the decision process, not part of the decision-making body itself. Independence is essential because at times the advocate and the council might differ, and the advocate must be free to express that difference. This is especially so at the stage of judicial review, where the advocate -- on behalf of environmental interests -- could be bringing an action against the siting council.

Washington and some other states have provided for "counsel for the environment" in their power plant siting legislation, but they assign the job to a member of the attorney general's office. The California Attorney General's office has also taken the position that it could serve as "counsel for the environment before the power plant siting council. Our office would welcome such a position."* With all respect for the important work on behalf of the environment carried out by the Attorney General's office, we think it is not suited for this post.

The Attorney General's office serves as legal counsel for state offices whose interests might at times be adverse to environmental interests. Indeed, the Office would represent the siting council itself: Deputy Attorney General Yost stated in the testimony referred to above that the Attorney General's

* From outline of testimony of Nicholas C. Yost before the Senate Committee on Public Utilities and Corporations, Hearing on Power Plant Siting, February 11, 1972, p. 3.

"legal role would probably be as counsel for the siting committee that is set up."* The Attorney General's office would thus not be in a position to bring judicial or other proceedings against the council -- an essential role of the environmental advocate. This is not to suggest that the Attorney General's office should not play a part in the siting process, or that it has nothing to contribute. Quite to the contrary, the office could be a valuable source of information and support, as it has been in the past. But it is not suited to serve as the formal environmental advocate.**

We believe the environmental advocate should be an independent publicly funded lawyer drawn from a group of candidates with experience in environmental law and demonstrated commitment to environmental quality. He could be appointed by the Governor, with the advice and consent of the legislature, for a fixed term. During that term he should be independent, subject to misconduct in office.

D. Research and Development

The siting council should have the authority to undertake and support, with the funds available to it (see Section E), research and development programs pertaining to any technological, institutional, or environmental aspects of electrical power. The research could be long term and broad gauged; it could also be concerned with a particular case before the council. It

* Ibid.

** Deputy Attorney General Yost, an excellent environmental lawyer, said on an earlier occasion that because the Attorney General's office is legal counsel for state agencies, it is "not equipped" to serve as environmental advocate. See Environmental Watchdogs, supra, p. 670, footnote 247.

could in any event be undertaken directly by council staff, by independent consultants, by utilities, by public interest groups, or by suitable combinations of these. In substance, any research or development project would be appropriate if it related to environmental aspects of need, siting, design, construction, operation, transmission, and so forth. Legislation in Washington state and Maryland, among other states, has provisions for research and development by independent consultants or otherwise.

E. Funding

Most power plant siting legislation proposed or enacted to date has relied on filing fees for the main source of funding. The difficulties with this approach are that it tends to provide revenues in a lumpy, unpredictable way and, further, that it provides inadequate funds. Washington state, for example, charges a fee of \$25,000 per application -- not near enough for thoroughgoing study and review.

Maryland has adopted what we consider to be a much more appealing approach. Its recent legislation provides for an Environmental Trust Fund made up of revenues raised through an environmental surcharge collected by utilities from electric power consumers. The money is used to support the state's siting program, including research.

We think the environmental surcharge represents a sound approach to funding. Set at the appropriate rate, it would yield a steady, predictable flow of adequate amounts of income. It would be geared to the problem, for as consumption (and thus the power problem) increased, the funds available to respond to the problem would also increase. At current levels of demand

for electrical energy in California, a surcharge of 0.10 mills per KWH(e) would raise about \$10 million per year. The average residential customer would pay a surcharge of less than 75 cents per year!

As we see it, the surcharge would provide virtually all the financing for the council and staff, the advocate and staff, and for research and development.* Maryland has recently used some of its Environmental Trust Fund money to support environmental research by several utilities. This represents but one example of an interesting application of funds. Among those funds allocated to support the research of others, however, priority should probably be given to funding environmental groups rather than utilities, for the former are much more in need of such support. Using some of the funds in this way would greatly strengthen the open planning process.

Because (unlike Maryland) we do not propose using Trust funds for site acquisition, we believe the approach would avoid the sort of problem that has arisen with the highway trust fund, where increasing demand generates resources to meet that demand, and hence tends to escalate production (positive feedback). The fund we propose would be properly spent only on measures to ease the problems of increasing power consumption, not to heighten them.

F. A Sketch of the Siting Process

We turn finally to a brief outline of the siting process we propose; this discussion should be read with reference to the Appendix. There are several assumptions behind what follows. First, most persons concerned with electrical

* We recommend in addition to the surcharge a filing fee sufficient in amount to discourage irresponsible applications.

energy problems in the state endorse the concept of a 15 or 20 year state energy plan, prepared within the executive branch and endorsed by the legislature. Such a plan would be concerned, among other things, with forecasts of loads and resources, needs in the context of state development and population policy, and site inventories on a regional basis. A plan, once adopted, would remain in effect for a given period and thereafter until amended. There is no conflict between our approach and the existence of such a plan. On the contrary, this concept appears to be a needed extension of the present planning process in the state. We simply concluded that sufficient attention was being given this issue by others, and accordingly we have concentrated our own work on the siting process. We assume below that, if such a plan were adopted, each of our recommended stages would take place against the background of any requirements of the plan. On the other hand, even if such an overall plan were not adopted, our recommended stages could still take place.

Second, we assume that in the case of nuclear power plants, proceedings subsequent to siting council certification (especially at the Federal level) and construction itself may consume as much as seven years time, whereas in the case of fossil-fuel plants such proceedings and construction may take only three years. We have therefore provided for a final siting council certification date seven years prior to expected "on-line" operation for nuclear power plants and three years for fossil-fueled plants. The total periods, and the periods within each stage, are only rough suggestions.

Third, we try not to reiterate in what follows any points made above. That is to say, when we refer to open planning in the following discussion we assume that any of the techniques we have already outlined could be employed. Further, we assume that appropriate research support would be made available at any stage, or that the council would contract with independent consultants to aid it in its deliberations. Finally, we focus our discussion on siting of new plants or transmission lines, though essentially the same process would apply to expansion of existing facilities. Our basic purpose here is to clarify the filtering-down process we propose, going from identification of possible sites, to rejection of unsuitable sites, to study of alternative suitable sites, to selection of the final site, to study for and approval of the final plan (with conditions) for that site. If at any stage it develops that no suitable site exists, the proposed development simply could not go forth.

1. Initiation and Stage 1. The siting process would begin with the filing of a Notice of Intent -- at least 12 years prior to expected "on-line" operation in the case of nuclear plants, at least 8 years in the case of fossil-fueled facilities. The Notice would state the utility's desire, say, to expand capacity, and would state the reasons for the desired action. All other relevant information would also be disclosed -- sites being considered, fuels and methods of operation being considered, location of transmission corridors, etc., together with a preliminary statement of the advantages and disadvantages of any alternatives being considered. The Notice would be prominently and publicly noticed by the siting council, sent to any individuals or groups on

its mailing list, and available for examination.

Filing of the Notice of Intent would initiate the first phase of open planning, the main purpose of which would be to identify and study alternative sites and construction and operation methods, and, insofar as possible, agree upon those that are unsuitable. Suitability would be considered against the background of alternative methods of supplying the power (purchased power, alternative generating methods) and against environmental impact criteria bearing on such things as:

- aesthetics
- radioactive, chemical and particulate discharges
- heat dissipation and water supply (if applicable)
- ecological impact
- land use compatibility

Adverse environmental effects which could not be avoided and possible irreversible and irretrievable commitments of resources should also be identified.

Stage 1 would end, after two years at most, with submission of a Preliminary Study by the utility. This document would identify all sites considered, summarize the open planning process and the views expressed therein, state conclusions as to sites considered unsuitable, and state the reasons for those conclusions in light of the criteria listed above. To the extent the utility and those who participated in the planning process agreed on unsuitable sites, such agreement should be stated. As to disagreements, the utility should state and support its position, and dissenters would submit

their own views in writing to the council.

The Preliminary Studies would not require detailed investigation, their major purposes being to build up an inventory of possible sites and to identify sites that appear to be clearly unsuitable.

2. Stage 2. The siting council would consider the Preliminary Studies and any opposing views, distribute those materials and hold public hearings (in the local areas concerned insofar as possible) with respect to them, conduct any independent studies deemed necessary, and, within 120 days, reject all sites considered unsuitable in light of the criteria outlined above. The first and second stages should continue until there are at least three suitable sites for each site needed.

3. Stage 3. At the end of Stage 2, the utility and concerned groups and individuals would be equipped with an inventory of at least three suitable alternative sites. Stage 3 would consist of no more than two years of open planning devoted to the preparation of detailed Environmental Impact Reports, comparing alternative sites, transmission corridors, methods of construction and operation, and so forth from the standpoint of the suggested criteria. These studies, however, would look at each alternative in depth and detail, the object being to identify the advantages and disadvantages of each. The studies should reflect the considerations required of Section 102 (C) statements by the National Environmental Policy Act. The study period would culminate in the utility's filing with the council its Environmental Impact Report. As with Preliminary

Studies prepared in Stage 1, the Impact Reports should identify all sites considered, discuss advantages and disadvantages of each, summarize the open planning process and the views expressed therein, state any conclusions as to the site the utility considers most desirable (if any), and state the reasons for those conclusions. Agreement and dissent among all who participated in the open planning process should also be discussed.

Dissenters could, as in Stage 1, submit their own views.

4. Stage 4. Based on the materials submitted, on testimony at public hearings, and on any studies initiated by it, the council would select the final site or sites and set forth any views it might then have on design, construction, and operation. The council would have 120 days in which to reach its decision.

5. Stage 5. This would be the final stage of open planning and public hearings. The utility and interested groups and individuals would work together to prepare a Final Plan for the site and for design, construction, and operation. The Plan would state the reasons for its content, summarize the open planning process and the views expressed therein, and set forth any areas of agreement and disagreement. Dissenters could file their own views, suggested plans, and the reasons therefor. The council would consider the materials submitted, hold public hearings on them, initiate any necessary studies and approve the Final Plan, disapprove it, or approve it with appropriate conditions. (We believe this entire process could be completed within 120 days, in light of the work accomplished in the earlier stages.)

The approved site would be certified and, insofar as the council is concerned, construction could begin according to the plan as finally approved.

The Council should have broad discretion as to conditions. For example, if a utility wishes a certain site, perhaps it might be required as a condition of certification to buy up and dedicate to public use a large amount of the surrounding area, or other areas, for recreational purposes, in this way paying for the costs it would be imposing on society. Accordingly, it might as a condition of obtaining a coastal site be required to buy up a large portion of the coastline and make it available for general public purposes, thus taking the land out of the hands of private developers. We hope this example, by the way, makes it clear that all coastal sites should not automatically be removed from consideration as possible sites -- apparently the position of some individuals and groups.

As another example, if a city, county, or city and county, wishes to exercise its right of eminent domain in order to site a thermal power plant in another city, county, or city and county, this entity would be required to provide for a payment in-lieu of property taxes to such city, county, or city and county. (Provisions for public-use zones and in-lieu payments were contained in S.B. 1310, passed by the Senate last year.)

G. Judicial Review

In recent years, judicial review of administrative actions bearing on the environment has been the scene of perhaps the most exciting developments

in environmental law. In our view, judicial review should be as full and open as possible, with a broad scope of review and access to all interested parties,* but it should be sought immediately (say by filing a notice of appeal within 30 days) after certification, and once completed it should be final. New York State's provision, for example, has some features that might serve as a model. It provides for timely review, although perhaps on grounds somewhat more narrow than might be desirable, and then goes on to provide that except for the review provided by the act, "no court of this state shall have jurisdiction to hear or determine any matter, case or controversy concerning any matter which was or could have been determined in a proceeding under this article or to stop or delay the construction or operation of a major facility except to enforce compliance with (the act) or the terms and conditions of a certificate issued" under the act.

* Open planning might be enhanced, and dilatory tactics discouraged, by providing that no person may seek judicial review if he has not participated in open planning phases, unless he can show good cause for not participating.

II. OUTLINE FOR A STATE SITING STATUTE

A. Summary of Provisions

Section 1: Findings of Fact and Statement of Policy. The Section is self-explanatory. We do wish to stress the explicit call for public participation in 1 (B) (3).

Section 2: Definitions. Notice that transmission facilities are covered by our proposal. See 2 (C) (1).

Section 3: Prohibitions. Subsection (B) contains a fairly common exemption provision.

Section 4: Thermal Power Plant Siting Council. The most important feature of this Section is that it calls for a council composed of regular members drawn entirely from the general public, rather than on an ex-officio basis from the heads of state agencies and so forth. The council would also consist of temporary members drawn from counties in which sites are under consideration. The purpose is to give local interests an effective voice in the siting process. Washington state's legislation has a similar provision. Section 4 also provides for certain disclosures and other steps required of council members in order to avoid conflicts of interest.

Section 5: Powers and Duties of the Council. The Section is largely self-explanatory. We should point out that the council has the explicit obligation to encourage public participation in planning, and, to this end, has power to appropriate funds to support planning studies by interested groups worthy of financial support. See Section 5 (B) and (D). This whole Section

delegates to the council the job of translating broad legislative mandates into working rules and regulations. Such an approach provides flexibility and capitalizes on experience, while at the same time saving the legislature a good deal of work. Many other states have taken this approach recently with respect to power plant siting. Section 5 (F) sets forth the broad contours of what we think should be the basis of standards governing site selection. See particularly Section 5(F) (7) and Section 9, which require the council to pay careful heed to local ordinances, though they would not necessarily be binding. Senator Alquist's bill, S.B. 1310, contains similar provisions.

Section 6: Office of Environmental Advocate. Many measures proposed or enacted in this and other states provide for a Counsel for the Environment, almost uniformly drawn from the Attorney General's Office. We heartily agree with the need for an advocate on behalf of environmental interests, but for reasons already expressed, we strongly believe the advocate should be independent, as proposed in this Section. Notice that the advocate would have the responsibility to take every feasible step to encourage a full open-planning process. See also Section 7 in this regard.

Section 7: Site Selection and Certification. The Appendix summarizes this Section accurately enough for our purposes here.

Essentially, we propose a staged process designed to expose a number of alternatives; reject those that are unsuitable, leaving a sound site inventory; select the best of the inventory; and prepare a cautious, reasonable, and well-thought-out plan. Throughout, the process would be marked by informal open-planning sessions and formal public hearings to be held in the area or

areas of concern. The fullest possible access to documents and other information is called for, and the council and the advocate have the continuing responsibility to encourage and police the open-planning process.

It should be noted that our proposal, like Senator Alquist's bill, calls for public-use zones and in-lieu payments. See Section 7(D)(4)(a) and (b).

It should also be noted that we provide a lead-time (12 years prior to on-line operation for nuclear facilities; 8 years for other facilities) long enough to allow for completion of a thorough state planning process prior to commencement of construction or filing for any required federal approvals.

Section 8: Judicial Review. This Section is based in part on New York's transmission line measure. It provides for a full judicial review, yet one that cannot be used merely for dilatory purposes.

Section 9: Preemption. This Section is much like Oregon's. Its purpose is to preempt the siting issue and to make the siting procedure one-stop, other than for the P.U.C. certificate of public convenience and necessity.

Section 10: Revocation or Suspension of Certification.

Section 11: Restraining Orders. These two Sections are self-explanatory.

Section 12: Funding. Many states fund through filing fees. In Section 7(a)(1) we call for filing fees, but more as a means to discourage irresponsible applications than as a source of funds. We propose that, as has been done in Maryland, the bulk of the funding for the entire siting program come from an Environmental Trust Fund sustained by a KWH surcharge.

Section 13: Public Access to Documents. This Section would make available the information necessary to full public participation in the planning process, but would at the same time give protection to trade secrets.

Section 14: Liberal Construction and Severability. This Section is self-explanatory.

B. Outline of a Statute

1. Findings of Fact; Statement of Policy

(A) Findings of Fact. The Legislature finds that the siting and construction of thermal power plants and transmission lines has demonstrated potential for serious adverse effects on the environment and natural resources of the State and the public health and welfare of its citizens. The Legislature further finds that procedures are needed to implement long-range plans for electric energy production in the State that give careful and systematic attention to such adverse effects in the context of total energy needs and in a manner that provides for full public participation.

(B) Statement of Policy: It shall be the policy of the State:

(1) to provide for such electrical energy as is clearly shown to be needed to maintain an adequate, reliable, and economical supply thereof, consistent with other State policies;

(2) to require systematic attention to the adverse impact of additional electrical energy on the State's environment and natural resources and the health and welfare of its citizens, and to require all reasonable and feasible measures to ensure that any such adverse impact shall be minimal and justifiable;

(3) to promote public participation in decisions relating to all aspects of electrical energy planning;

(4) to ensure that in all such decisions legitimate local interests are protected to the fullest extent consistent with the policies stated in this subsection.

2. Definitions.

(A) Company means any municipality, public utility district, electric company, electric cooperative or joint operating agency or combination thereof, engaged in or authorized to engage in the business of generating, transmitting or distributing electrical energy.

(B) Council means the Thermal Power Plant Siting Council.

(C) Electric Facility means any of the following when serving as part of a central generating system:

(1) an electric transmission line more than one mile in length with a design capacity of 200 kilovolts or more between phase conductors for alternating current or between poles for direct current;

(2) any stationary, underground, or floating electric generating facility using any fuel, including nuclear materials, with a generating capacity of 50MW(e) or more and including associated equipment for furnishing electricity; and

(3) such substations, switch-yards or other facilities prescribed by the Council.

(D) Person means any person, firm, association, organization, partnership, business trust, corporation or company. Person includes also any city, county district, the state or any department or agency thereof and the United States, to the extent authorized by federal law.

(E) Site means any proposed location whereon any electric facility is to be located.

(F) Site certificate or certification means a binding agreement between the state and applicant, authorizing the applicant to construct and operate a thermal power plant on the approved site and incorporating all conditions imposed by the Council and all warranties by the applicant.

(G) Construction means any clearing of land, excavation or other action that would affect the natural environment of the site or route of an electric facility, but does not include changes needed for temporary use of sites or routes for non-utility purposes, or sums in securing geological data, including necessary borings to ascertain foundation conditions. Construction shall not be deemed to have commenced until there has been an expenditure of not less than \$250,000.

(H) Fund means the Environmental Trust Fund established by Section 12 of this Act.

3. Prohibitions

(A) After the effective date of this act no electric facility or modification thereof shall be constructed unless a site certificate shall have been issued according to this Act.

(B) Exempted from this Act unless waived by the applicant are electric facilities as to which the State Public Utilities Commission has held one or more hearings on the applications for a certificate of public convenience and necessity, or a municipally owned facility which has commenced the sale of bonds or bond anticipation notes for construction.

4. Thermal Power Plant Siting Council

(A) There is hereby established a Thermal Power Plant Siting Council, which shall consist of five full-time regular members, and additional temporary members, selected and appointed as follows:

(1) one regular member appointed by the Governor for a term of four years. The Governor's appointee shall have background and experience in the field of thermal electric power production;

(2) two regular members appointed by the Senate, initially for terms of three years and thereafter for terms of four years; one Senate appointee shall have background and experience in environmental health and the other shall be chosen to represent the general public;

(3) two regular members appointed by the Assembly, initially for terms of two years and thereafter for terms of four years; one Assembly appointee shall have background in and dedication to environmental protection and resource conservation and the other shall be chosen to represent the general public;

(4) one temporary member appointed by the county legislative authority of every county wherein there is located wholly or partially a site or sites under construction by the Council, provided, however, that each member so appointed shall sit with the Council only so long as the Council has under

consideration the proposed site or sites in the county which such temporary member represents and each such member shall serve until there has been a final acceptance or rejection of such proposed site or sites by the Council.

(B) Appointments of regular members are to be made within 60 days of the passage of this Act, and thereafter within 30 days after the end of any member's term. No person may serve as a member of the Council for more than two consecutive terms or parts thereof.

(C) Each regular member of the Council shall have one vote on all matters decided by the Council during the time such member sits on the Council.

(D) The Council shall establish procedures for the election of one of the regular members to the office of Council chairman, and shall establish the term of such office. The chairman of the Council shall receive \$1500 annually over and above the compensation of the other regular members.

(E) Regular members of the Council shall be compensated according to _____ and temporary members according to _____.

(F) (1) Before serving in any official capacity on the Council, each member shall make a full and complete report of any pecuniary interest he has in any electric utilities or real estate. This shall be made part of the public record.

(2) If a member has a pecuniary interest of \$1000 or more in an electric utility, he shall divest himself of such amount or put the amount into an irrevocable trust until the expiration of his term with the Council.

5. Powers and Duties of the Council

In addition to the powers and duties expressed in Section 6 of this Act, the Council:

(A) may employ personnel, consultants, and hearing officers, purchase materials and supplies, and enter into contracts necessary to carry out the purposes of this Act.

(B) shall conduct and prepare, independently or in cooperation with others, through the use of consultants, or otherwise, studies, investigations, research and programs relating to all aspects of electrical energy planning; and in so doing may make grants from the Fund to support such activities by groups, organizations, and individuals interested in environmental quality, giving due regard to the merit and importance of the proposed activity to the purposes of this Act, and to the ability of any such groups, organizations, or individuals to find other means of financial support;

(C) shall advise, consult, and cooperate with other agencies of the State, political subdivisions, industries, other States, the federal government and affected groups, in furtherance of the purposes of this Act, and shall, to the fullest extent feasible, coordinate its actions and procedures with the actions and procedures of any governmental agency approval by which is necessary to construction;

(D) shall encourage voluntary cooperation by all concerned groups, organizations, and individuals, public and private, in studying, selecting, and applying standards to realize the purposes of this Act;

(E) shall establish standards to be met by applicants for site certificates, and rules and regulations governing the filing of applications, conduct of hearings, and issuance of certificates;

(F) shall set standards for electric facilities which take into account:

(1) health, safety and welfare;

(2) effects of waste heat, moisture, water and air contaminants and other discharges, including particulates and residuals, on the environment and natural resources, subject to the rules of the federal government as to radioactive discharges;

(3) the characteristic and highest use of any proposed site, including aesthetics and the impact of selection of the proposed site on present and future uses of adjacent areas;

(4) ability of the area surrounding a proposed site to absorb industrial and population growth that would come from the selection of the site;

(5) suitability of a site for use in the future as an industrial or electric facilities park;

(6) present and future power needs, and considerations of technical and economic feasibility;

(7) relevant regulations of cities or counties relating to construction and operation of electric facilities within their borders, subject to the provisions of Section 9 of this Act;

(G) shall conform to all applicable lawful rules of the federal government;

(H) shall perform such other acts as necessary to carry out the duties and powers of the Council set forth in this Act.

6. Office of Environmental Advocate

(A) The Governor shall, within 60 days of the effective date of this Act, designate a person, who is not one of the regular or temporary members of the Council, to serve as Environmental Advocate. The person so designated shall be a member in good standing of the California Bar and shall in addition have background and experience demonstrating familiarity with the environment and other aspects of thermal power plant siting, and dedication to maintenance of environmental quality and conservation of natural resources. Prior to designating the Environmental Advocate, the Governor shall solicit recommendations of candidates from all interested groups and individuals within the State. The Environmental Advocate shall serve for a term of three years, and no person shall serve as Environmental Advocate for more than two consecutive terms or parts thereof.

(B) The Environmental Advocate shall be compensated on the same basis as _____.

(C) Powers and Duties:

(1) The Environmental Advocate shall select, appoint and compensate such assistants and employees as necessary, with the funds appropriated by the legislature.

(2) The Environmental Advocate may delegate to other qualified members of his office any of his authorities or duties except this power of delegation.

(3) It shall be the duty of the Office of Environmental Advocate to:

(a) encourage full and open public participation in the power plant siting process on the part of all interested groups and individuals by any appropriate means, including but not limited to the rendering of technical or legal advice or assistance, and the arrangement of or participation in meetings, hearings, and conferences;

(b) represent as fully as possible and appropriate the interests in maintenance of environmental quality and conservation of natural resources in all proceedings before the Council, whether upon request by the Council, interested groups or individuals, or upon the Environmental Advocate's initiative;

(c) represent as fully as possible and appropriate, by intervention or otherwise, such interests, upon request or otherwise, in any judicial proceedings seeking review of the Council's action or inaction;

(d) engage in any other activities necessary and proper to full and effective representation of the interests in maintenance of environmental quality and conservation of natural resources in the context of any aspects of thermal electrical energy planning.

(4) The Environmental Advocate shall establish guidelines to aid in the implementation of the foregoing powers and duties.

7. Site Selection and Certification

(A)(1) Any company proposing to construct an electric facility shall submit a Notice of Intent, accompanied by a filing fee of \$25,000 for

each facility, to the Council at least 12 years prior to the date of anticipated operation in the case of a nuclear facility and at least 8 years prior to the date of anticipated operation in the case of other facilities.

(2) The Notice shall state the applicant's intentions and the reasons therefor, specify at least five alternative sites for each site required, specify fuels and methods of construction and operation being considered, and make a preliminary statement of the advantages and disadvantages of alternatives under consideration.

(3) The Notice shall be in a form prescribed by the Council.

(4) The Notice shall be published in a newspaper of general circulation in each affected area, and shall be submitted or made available by the Council to any interested person, including federal, state, and local agencies and persons or groups interested in the maintenance of environmental quality and the conservation of natural resources.

(B) (1) Within 60 days of the filing of the Notice of Intent the Council shall initiate its own studies and encourage cooperative studies by others with a view to determining, in light of the criteria and guidelines developed by the Council, the unsuitability of any site or sites, or any means of construction or operation proposed in the Notice or subsequently proposed by any party. The Council may undertake its own studies by any appropriate means, including but not limited to those specified in Section 5 (B) and (C) of this Act. The Council shall require and encourage cooperative studies by others by any appropriate means, including but not limited to those specified in Section 5(B) and (D) of this Act. The Environmental Advocate shall promote

cooperative studies by encouraging, arranging, and participating in meetings, hearings, conferences and other planning and consultation sessions as specified in Section 6(C)(3)(a) and (b) of this Act.

(2) Any studies or consultations undertaken pursuant to the foregoing need not and should not be limited to the alternatives initially proposed in the Notice of Intent. Any party engaged in any part of the foregoing study and open planning process may submit any other alternatives for consideration. The Council shall be notified of any such submissions.

(3) Within no more than 22 months of the filing of the Notice of Intent, all interested persons shall submit to the Council, in a form prescribed by it, Preliminary Studies setting forth conclusions, and the reasons therefor, as to the unsuitability of any alternative in light of the criteria developed by the Council. Any person may file objections to any Preliminary Study within two months of the filing of any Preliminary Study. Each Preliminary Study shall identify precisely the steps taken to encourage open planning and study on the part of all interested persons. The Environmental Advocate may submit his own Preliminary Studies, object to or comment on any other study and shall comment on the cooperation or lack thereof on the part of interested persons.

(4) The Council shall consider all Preliminary Studies, shall hold public hearings in affected areas with respect thereto, and shall within 90 days of the close of the time for filing objections to Preliminary Studies, render an order rejecting unsuitable alternatives and stating the reasons for such order. The rejection of an alternative as unsuitable shall not disqualify it for submission in a subsequent Notice of Intent. In its order the Council

shall make any appropriate recommendations concerning future activities bearing on the selection of a site and construction and operating methods.

(5) The Council shall endeavor throughout to assure that at least three suitable sites remain for consideration after the rejection of unsuitable sites, and may if it deems necessary reopen or extend any of the foregoing proceedings to realize that objective. If no suitable site exists, the certification process shall come to an end.

(6) The rejection order shall be given the same public notice as the Notice of Intent.

(C)(1) Within 30 days of its rejection order, the Council and the Environmental Advocate shall initiate the same procedures as set forth in Section 7(B) of this Act for the purpose of ensuring the preparation of detailed Impact Reports bearing on the selection from among suitable alternatives of the most desirable site and methods of construction and operation. The Impact Reports shall be in a form prescribed by the Council and shall specifically give detailed attention to the advantages and disadvantages of each alternative, in light of the Council's criteria.

(2) Impact Reports, objections thereto and comments thereon by any interested person and by the Environmental Advocate, shall be submitted according to the same time table governing submission of Preliminary Studies.

(3) The Council shall consider all Impact Reports, shall hold public hearings in affected areas with respect thereto and shall within

120 days of the close of the time for filing objections to Impact Reports, render an order selecting the final site or sites, if any, and making recommendations as to design, construction, and operation. If the Council concludes that no site (or sites) meets the requirements of this Act, it shall either reopen or extend any of the foregoing proceedings or bring the certification process to an end.

(D)(1) Within 30 days of its selection order, the Council and the Environmental Advocate shall initiate the same procedures as set forth in Section 7(B) and (C) of this Act for the purpose of developing a Final Plan for the facility, its construction and operation. The Plan shall be submitted by the company in a form prescribed by the Council and has as its purpose the setting forth of information to assure that the facility will be located, constructed, and operated in such a way as to give the fullest feasible protection to environmental quality and resource conservation, in light of the Council's criteria.

(2) A Final Plan or Plans, objections thereto, and comments thereon shall be submitted within no more than 90 days of the Council's selection order, according to procedures prescribed by the Council. Within 30 days of such submission the Council shall consider such Plan or Plans, hold public hearings in the affected area or areas, and approve, disapprove, or approve subject to conditions the Final Plan.

(3) The Final Plan, when signed by a majority of the Council and accepted by the company, shall with its conditions constitute the certificate and shall bind the company and the State.

(4) The Council may attach any conditions necessary and appropriate to protect the environmental quality and natural resources of the State. Where applicable, each certificate:

(a) may contain, if deemed beneficial by the Council considering the standards promulgated by it, a condition that any facility to be sited within any undeveloped area shall include a public-use zone extending from the perimeter of the plant site a distance sufficient to provide a reasonable area for the public's recreation and enjoyment, or for use as an industrial or electric facilities park. The acquisition and maintenance of such zones shall be provided by the applicant, subject to reasonable restrictions for reasons of security, or public safety. Expenses incurred by the applicant in acquiring and maintaining such zones shall be included in the applicant's rate base for rate setting purposes. In the case of coastal sites, facilities shall be set back from the shoreline to the extent necessary to preserve full and unrestricted width of the beach or shoreline recreation area and to allow reasonable public use of such beach or recreation areas and related adjacent areas;

(b) shall contain a condition that any city, city and county, or county proposing to exercise the power of eminent domain to site a thermal power plant in another city, city and county, or county, shall provide for a payment in lieu of property taxes on such site to such city, city and county, or county. The amount of such payment shall be determined by the Board of Equalization of the city, city and county, or county within which the site lies.

8. Judicial Review

Any action or failure to act within the prescribed period by the Council shall be subject to judicial review initiated within 30 days of such action or failure to act by any interested person or by the Environmental Advocate on his own initiative or behalf or on behalf of any interested person, subject to the provisions of Section 6. Provided, however, that no person may seek judicial review if he has not participated in proceedings pursuant to Section 7 of this Act, except upon a showing of good cause for not so participating. No court of this State shall have jurisdiction to hear or determine any matter, case or controversy concerning any matter which was or could have been determined in a proceeding before the Council, or in judicial review proceedings under this Section, or to stop or delay the construction or operation of an electric facility except to enforce compliance with this Act or the terms and conditions of a certificate issued pursuant to this Act.

9. Preemption

The State hereby preempts the regulation and site certification of electric facilities. Subject to the conditions set forth therein, any certificate issued by the Council shall bind the State and its agencies and all counties and cities and political subdivisions in the State as to the approval of the site and the construction and operation of the electric facility. Provided, however, that if the certificate is inconsistent with the provisions of any ordinance of any county, city or political subdivision in the State, it shall contain a specific finding in each instance that the inconsistency is necessary

for reasons of public health, safety, welfare, or convenience and that there is no more prudent and feasible alternative to the provisions of the certificate.

10. Revocation or Suspension of Certification

(A) A certificate may be revoked or suspended for:

(1) Any material incorrect statement in the application, or in supplemental or additional statements of fact or studies required of the applicant when an accurate answer would have warranted refusal to recommend an issuance of the certificate in the first instance;

(2) failure to comply with the terms, conditions, or warranties of the certificate;

(3) violation of the provisions of this Act at any time before or after certification.

(B) The Council shall promulgate regulations providing, where appropriate, for hearings prior to revocation or suspension, and for reasonable time periods in which to come into voluntary compliance with the terms and requirements of this Act.

11. Restraining Orders

(A) A Superior court of this state may issue such restraining orders and such temporary and permanent injunctive relief as is necessary to secure compliance with this Act or with a certificate issued pursuant to this Act.

(B) The court may assess civil penalties in an amount of not less than \$1000 nor more than \$25,000 per day for each day of violation of any provision of this Act or rule, regulation or site certification issued pursuant thereto.

12. Funding

(A) There is hereby created an Environmental Trust Fund, effective _____. For the purposes of this Act, there shall be established as an added cost of electric power generation a surcharge per kilowatt hour or no less than 0.10 mils nor more than 0.15 mils, per KWH, as fixed by the legislature, on all electric power generated or sold in the State. The Public Utilities Commission shall authorize companies to add the full amount of the surcharge to customers' bills. Revenues from the surcharge shall be collected by the State Treasurer and deposited into the Fund, provided that companies shall not be required to pay into the Fund more than that collected less 1 1/2% for expenses incurred by the companies in collection.

(B) Commencing in _____, the Council in consultation with the Environmental Advocate, shall prepare an annual budget required to carry out the provisions of this Act. Upon approval of the budget by the legislature, the Fund and the filing fees required by Section 7(A)(1) of this Act, will be used exclusively to provide the necessary appropriations for such budget.

13. Public Access to Documents

All documents of any sort kept on file with the Council or submitted pursuant to this Act shall be available for public inspection and copying at cost, provided, however, that any information alleged and established to relate to secret processes, devices or methods of construction or manufacture will be kept confidential and not made part of the public record.

14. Liberal Construction and Severability

All provisions of this Act are to be liberally construed and if any provision of this Act is held to be unconstitutional, the remainder of the Act shall not be affected.

APPENDIX

Assumption: Preparation of 15-20 year state energy plan through open planning and public hearings. The plan would establish state energy policy (at least electrical). It would develop load forecasts, identify categories of energy sources (geothermal, solar, nuclear, fossil-fueled) and project their use, identify general locations (off-shore, coastal, inland, underground) and project their use. Identify transmission line corridors. Siting council could be responsible for preparation of plan (subject to legislative endorsement). Plan preparation could precede or coincide with implementation of siting program.

Initiation	Stage 1 no more than 2 years	Stage 2 120 days
Utility prepares and files <u>Notice of Intent</u> . Notice states need and reasons for; identifies preliminary plans; identifies alternative facilities and sites per site and preliminary statement of advantages and disadvantages of each. <u>Notice of Intent filed 12 years prior to operation for nuclear and 8 years for fossil fueled.</u>	<u>Open Planning</u> . Notice of Intent disseminated by council; meetings among utilities and relevant private and public groups initiated by utilities, environmental advocate, and interested individuals. Other alternative facilities and sites identified. Studies on all alternatives sufficient to <u>identify unsuitable alternatives</u> . Studies may be undertaken or funded, in whole or part, by council. Any number of possible site and facility alternatives. Objections may be filed.	<u>Submission of Preliminary Studies</u> . Rejection of unsuitable sites based on these and <u>public hearings</u> . Council makes any appropriate preliminary recommendations to guide future activities. <u>Inventory of 3-5 sites per site should be result at this stage.</u>
RUNNING TOTAL OF YEARS CONSUMED: 0	2	2 1/3
Stage 3 no more than 2 years	Stage 4 120 days	Stage 5 CERTIFICATION 120 days
Period of <u>open planning</u> to prepare detailed <u>Impact Reports</u> on site inventory and facility, etc. alternatives. Dynamics same as Stage 1 but studies more detailed (like NEPA). Objections and alternate plans may be filed.	Impact Reports considered. <u>Final site selected based on reports and public hearings</u> . Recommendations made by council for <u>Final Plan</u> . <u>Open planning</u> for final plan begins.	<u>Open planning period and public hearings held</u> . Council certifies site and <u>Final Plan with appropriate conditions</u> . ----- <u>Expedited judicial review.</u>
RUNNING TOTAL OF YEARS CONSUMED: 4 1/3	4 2/3	TOTAL 5

Note: Final approval given at least 7 years prior to expected on-line operation for nuclear, 3 years prior to expected on-line operation for fossil-fueled.